- 2. EPD coordinate off-site grading plan with DRD (urban. Development staff); note street tree planting plan; provide details on lighting plan; plan prepares use of green roof for water quality
- 3. DPS SWM concept approved 6/18/01; utilization of green roof
- 4. MCDPW&T 5' minimum all the way to MD 118; Parking lot layout, loading spaces per SRN; Storm Drain analysis needed; Show MD 118 ROW line across north end of Crystal Rock Drive;
- WSSC service is available, provide permit for hook-ups; Water and Sewer available. Submit to Permit Services for On-site review. Submit to WSSC Relocations for relocation of existing 8"S
- 6. MDSHA no comments
- 7. TPD see hand-out; proposed changes will require a service traffic statement; (possible study will be required; provide lead in sidewalks)
- 8. PEPCO/VERIZON/Washington Gas cleared 10 foot PUE parallel and contiguous to all public right-of-ways; provide underground of utility lines and provide prelim utilities easement for appropriate service
- 9. DPS (Well & Septic) no comments
- 10. DRD (Site Plan Reviewer) Explain vehicular entry; More green space for open area; Bring 1<sup>st</sup> floor of parking building to underground; Show building parking plan and building section; Show all parking circulation and vehicular circulation; Street trees on Crystal Rock Drive; Outdoor sitting area; Public amenities at front of building
- 11. CBP no comments
- 12. Parks Department no comments
- 13. DEP W-1 and S-1 sewer and water category acceptable
- 14. MCFRS Standard Requirements (hand-out)

8-02014 CLARKSBURG TOWN CENTER

Received 00/00/01

Zone: RMX

484 Lots,

103.84 Acres

TERRABROOKE CLARKSBURG LLC CHARLES P. JOHNSON & ASSOCIATES ApplicantEngineer

#### COMMITTEE COMMENTS:

- 1. DRD no comments
- 2. EPD no comments
- 3. DPS no comments

- 4. DPS (Subdivision) Eliminate chokers on "service road" south of Clarksburg Square Road; Provide 4'wide median island on Clarksburg Square Road at Piedmont Road (concept sketch to be supplied); Show one-way northbound designation of "service drive" north of Clarksburg Square Road; Show one-way designation around the square; Show curb ramps at all intersections with consistent design that meets ADA; Need to explore options for eliminating/relocating "service drive" intersection at northernmost roadway intersecting Piedmont Road (if this "service drive" is public it needs to be 20' wide); Will make comments on Piedmont Road at permit review stage
- 5. WSSC Pat Tighe (301-206-8749) is assigned for System Integrity review
- 6. MDSHA no comments
- 7. TPD see hand-out
- 8. PEPCO/VERIZON/Washington Gas cleared 10 foot PUE parallel and contiguous to all public right-of-ways
- 9. DPS (Well & Septic) no comments
- 10. DRD (Site Plan Reviewer) -Planting on A-305 to conform to earlier approvals show bike path and PUE; Please label all plants; Review planting on Town Square ped access is limited except for paths is that the intent? How about removing some of the boundary shrubs to invite peds in or to allow views in. What is intended purpose of the square visual, sit,?; Shade trees 40 ft on center; -Explain recreation supply chart it doesn't show supply covering demand. The recreation area shown on page L-13 was part of Phase I and cannot be used again; Address noise issues on A-305; Ped connect to open space through sfd's; Describe the operations of the shared driveways in the sfd's sheet 6/14; Review service road access point on Piedmont Road; Alley detailing as develop for Phase I A; Screen pool from adjacent th's; Sheet L-5 ped connect to path in open space from Phase 1; Landscaping at end of SWM area L-5, screen units; Screen all units rear and side yards that are adjacent to streets and driveways with fencing or plant material; Show which details from design guidelines are going to be used
- 11. CBP no comments
- 12. Parks Department Needed improvements to Kings Local Park, including ballfields and active recreation facilities construction; Trails construction including Clarksburg Greenway Trail and connections from the residential area and from Kings Local Park to the Greenway Trail
- 13. DEP W-1 and S-1 sewer and water category acceptable
- 14. MCFRS Standard Requirements (hand-out)



#### DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan

County Executive

09 02 D1:26p

May 9, 2002

Robert C. Hubbard

Mr. Jeffery Strulic Charles P. Johnson & Associates 1751 Elton Road Silver Spring, MD 20903

Re:

Stormwater Management CONCEPT Request

07776314

for Clarksburg Town Center Phase 2

Preliminary Plan #: 1-95042

SM File #: 204464

Tract Size/Zone: 70.3 acres/RMX-2
Total Concept Area: 70.3 acres

Tax Plate: EW

Lots/Block: G, I, J, K, L, M, N, P, R, S & T

Parcel: A

Liber/Folio: 6776/876, 8825/755

Montg. Co. Grid: 09D03

Watershed: Little Seneca Creek

#### **SPECIAL PROTECTION AREA**

Dear Mr. Seidleck:

Based on a review by the Department of Permitting Services, the Final Water Quality Plan (FWQP) for the above mentioned site is conditionally approved.

<u>Site Description:</u> The site is the remaining portion of the Clarksburg Town Center and consists of 70.3 acres located between Clarksburg Road, Peidmont Road, and Stringtown Road. The proposed zoning of the site is RMX-2 and will consist of mixed residential (single-family detached, townhouses, apartments and condominiums) along with a school, park and associated infrastructure. This site is located in the Clarksburg Special Protection Area (SPA) of the Little Seneca Creek Watershed.

Stormwater Management: Water quantity control for this phase will be provided via an extended detention dry pond and the existing wet pond #1. Pond #1 provides infiltration for the one-year storm and pond #3 will provide control of the one-year storm, with an adjustable release rate for a maximum of 24 hours detention time in accordance with the new state standards. Quality control will be provided via a treatment train that consists of vegetated conveyance swales, bio-retention structures (for small drainage areas), surface sand filters, infiltration structures (where feasible) and ground water recharge areas for the rooftops. In areas where open section roads are not feasible, additional water quality structures are required to offset the lost benefits that open section roadways provide. These offsetting structures may include additional infiltration structures, bio-retention structures or surface sand filters. Areas that are intended for vehicular use are to be pretreated prior to entering any water quality structures. The water quality structures must be sized to treat a minimum of one-inch over the proposed impervious area.

The locations of open section and closed section roads along with the locations and nature of all of the proposed water quality control structures (including the offsetting water quality structures for the loss of open section roads) must be clearly identified on the initial sediment control/stormwater management/water quality plan. Additional monitoring may be required depending on the final location and configuration of the water quality structures.

Sediment Control: Redundant sediment control structures are to be used throughout the site. These are to include upland sediment traps, which drain to secondary traps down grade, or when this is not feasible, sediment traps with forebays will be acceptable. All sediment-trapping structures are to be equipped with dewatering devices. The following features are to be incorporated into the detailed stormwater manage/sediment control plan:

- All pertinent stormwater management structures must be designed, approved, permitted, and bonded with the initial sediment control plan. Phasing or otherwise delaying permitting of stormwater structures will be unacceptable.
- The earth dikes that feed the sediment traps are to be constructed as a type B dike utilizing trapezoidal channels to reduce flow rates.
- The site grading shall be phased, whenever possible, to limit disturbance and immediate stabilization is to be emphasized.
- 4. Sitt fence alone will not be allowed as a perimeter control. The use of multiple rows of super silt fence will be acceptable for small areas of disturbance.

<u>Performance Goals and BMP Monitoring:</u> See the attached addendum dated May 8, 2002, and for further information contact Keith Van Ness at MCDEP.

NOTE: The addendum to the Final Water Quality Plan for Clarksburg Phase II detailing the Performance Goals, how the goals will be met, and a detailed BMP Monitoring Plan must be received and approved by DPS prior to submission of detailed sediment control and stormwater management plans.

<u>Conditions of Approval:</u> The following conditions must be addressed in the initial submission of the sediment control plan: This list may not be all-inclusive and may change based on available information at the time of the review:

- 1. Due to the relatively low use of open section roads, every opportunity to provide additional groundwater recharge throughout the site must be taken. This is to include areas along the backs of lots and any other open area (e.g., parking islands, under play fields, tot lots, open space around buildings, etc.). If sufficient recharge can not be provided in these areas, lots may have to be deleted.
- 2. Should MNCPPC/EPD determine that all pond embankments must be moved back from the environmental buffers 15 feet, MCDPS may require a realignment of lot lines to assure adequate space for all structures.
- 3. Under no circumstances will any slope into, on, or around any stormwater structure be allowed to be steeper than three feet horizontal to one-toot vertical ratio. Any location where this occurs may be required to either, realign lot lines or constructed re-enforced concrete retaining walls. Note: Wood retaining walls will be unacceptable on the stormwater manage parcels.
- 4. All stormwater management structures, along with a 12-foot wide driveway for access, will be required to be located on stormwater parcels. This is not applicable where the structures are constructed under parking lots or in Islands.

- 5. Provide sate conveyance of all runoff to one of the stormwater management structures as shown by the drainage divides on the plan.
- 6. All recharge structures will be excavated to existing ground; none are to be constructed in fill.
- Sand filter #10 and the infiltration structure above it will need to be reversed or combined to provide a series treatment system.
- Sand filler #10's underdrain will discharge to the stream valley, not back to the storm drain system.
- 9. It appears that sand filter #10 will be designed as a NRCS-MD 378 pond. As one, it will be required to meet most criteria. Further discussion should take place prior to beginning its design.
- A further review of the roof top areas to the recharge structures may need to be adjusted due to architecture designs.
- 11. It appears that a few lots near proposed quantity control structure drain directly into the structure without being treated for quality control. Quality control is required for all impervious areas.
- 12. Provide clear access to all stormwater management structures from a public right-of-way.
- The proposed water quality inlets must be approved by DPS (a drop manhole will not be acceptable).
- 14. Water quality structures used for sediment control must have a minimum undisturbed buffer of two feet from the bottom of the sediment trap to the bottom of the stormwater structure.
- 15. At a minimum, one foot of stone (dead storage) is to be provided below the outlet pipe of all of the aproposed surface sand filters to provide additional groundwater recharge.
- 16. All of the proposed stream crossings are to use environmentally sensitive design criteria.
- 17. Percolation tests must be performed to determine the feasibility of providing infiltration structures for water quality and ground water recharge.
- 18. Provide a tree-planting plan to allow for shading of the dry pond outfalls (into the low flow channels and out of the ponds).
- 19. MCDPS reserves the right to require the developer to provide full-time, third-party, on-site, sediment control inspection if the department decides the goals of the Water Quality Plan are not being met

Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended Water Quality Plan requirements.

Jeffery Strulic May 9, 2002 Page 4

If you have any questions regarding these actions, please feel free to contact Richard Gee at (240) 777-6333 or Leo Galanko at (240) 777-6242.

Sincerely,

Richard R. Brush, Manager

Water Resources Plan Review Section Division of Land Development Services

RRB: enm: CN204464

CC:

M. Shaneman

M. Piefferle

L. Galanko

SM File # 204464

Qn: on-site 70.3 ac Qt: on-site 70.03 ac.



## DEPARTMENT OF ENVIRONMENTAL PROTECTION

Douglas M. Duncan County Executive

James A. Caldwell Director

## Attachment to the Final Water Quality Plan for Clarksburg Town Center Phase II **Description of Monitoring Requirements**

Date: May 8, 2002

Preliminary Plan #: 1-95042

2407776314

SM File #: 204464

The purpose of this attachment is to add specificity to the county BMP monitoring protocols and to the BMP monitoring plan described in the addendum to the FWQP for Clarksburg Town Center Phase II. Some supplemental monitoring, QA/QC, data analysis, reporting and record keeping tasks will be explained in this attachment.

This BMP monitoring is being done to address whether the site performance goals outlined in the addendum to the FWQP for Clarksburg Town Center Phase II were met or not. The purpose of the data analysis and reporting is to describe quantitatively how the performance goals were met. Monitoring efforts and reports must employ scientific methods in an attempt to determine effectiveness of BMPs. Monitoring is to be done according to DEP BMP Monitoring Protocols. However, these monitoring protocols are intended to provide a framework only. Some supplemental requirements are provided in this attachment. Thorough and careful analysis of data is required. Data analysis methods employed may vary depending on the results obtained. Methods and assumptions should be detailed. DEP BMP Monitoring Protocols are available at http://www.co.mo.md.us/services/dep/Publications/pdf%20files/bmpprotocols.pdf

## Specific Monitoring Requirements

- BMP monitoring reports must include a table with dates of all major construction activities which take place on the site. (Groundbreaking, clearing, grading, BMP construction, BMP conversion, pond maintenance, sediment spills and cleanup, etc.)
- Annual base flow and flow-weighted stormwater samples will continue to be collected as 2. during pre-construction. Results should be compared to previous results to determine the effects of BMPs and the project overall.
- Continuous flow data will be collected as during pre-construction. Results will evaluate 3. the effect of BMPs and the project on stream flows. Lag times, base flows, storm peaks, and other parameters will examined and compared to pre-construction conditions.



- 4. Stream water temperatures will be monitored at the three locations designated during the pre-construction period. This monitoring will occur from June 1 through October 1 each year. Equipment accuracy is to be checked prior to use in spring. An accuracy check after retrieval in fall may be necessary depending on results obtained. Consult with equipment manufacturer or DEP for appropriate procedures. All accuracy checks are to be submitted with data analysis and reports. Temperature loggers should be set to take readings as frequently as possible. Consult with DEP if readings will be taken less frequently than every 30 minutes. Data from the loggers is to be closely compared to preconstruction conditions to identify any patterns indicating temperature impacts of the project. Rainfall, air temperature and flow data should be considered in the analysis. Rain and temperature gages will be maintained on the site to collect the relevant data. Analysis should be presented with illustrative graphs and conclusions regarding BMP effectiveness.
- TSS grab sample locations will be established at a sediment pond on the site during construction. Exact sampling locations will be determined by DEP in the field to allow evaluation of the effectiveness of redundant sediment traps. Sampling is to be done quarterly during storm events throughout the construction phase. Storms should have at least one half inch of rainfall in a 24 hour period to be counted towards this requirement. Samples should be collected within 24 hours after the storm. The storms during which the data was collected should also be characterized for duration and total rainfall. Storm frequency (return interval) should be reported as described in Technical Paper #40 of USDOC Weather Bureau. Results should be examined to determine the efficiency of the structure and percent removal of pollutants. Data should be compared to past periods and graphs should be provided to support conclusions.
- 6. Quarterly photographic monitoring of selected outfalls will be required to determine the stability of the area. DEP will locate sites for these photos in the field with the consultant. Photos should be taken from the same location, height, etc. to facilitate comparison. An object of known size should be included with each shot to provide a frame of reference. Reports should evaluate whether flows from the structure are causing erosion or instability.
- 7. Embeddedness readings will continue as during pre-construction. Photos of the stream bottom should be taken concurrently with embeddedness readings. Reports should compare pre-construction data with data collected during subsequent periods to evaluate the effect of the project. Graphs should be presented along with conclusions.
- 8. Groundwater monitoring will continue as during pre-construction. Actual elevation of the groundwater should be reported as well as the depth to water from the ground surface. Data should be analyzed to determine the effectiveness of site design and stormwater management in providing infiltration and maintaining groundwater levels. Data from the pre-construction period should be compared to results obtained in subsequent periods. Graphs should be provided to support conclusions.

9. Cross sections established during pre-construction will be monumented and surveyed annually. Data will be plotted and compared over time to evaluate channel stability in the tributary. Photos of the cross section looking upstream and downstream should be collected annually also. Photos should be taken from the same location, height, etc. to facilitate comparison. An object of known size should be included with each shot to provide a frame of reference. Reports should evaluate whether the BMPs are effectively preventing degradation of the channel.

10. Sampling of water quality BMP's will be performed to ascertain their effectiveness and the benefits of redundant design. Grab samples will be collected from the baseflow of pond 3. Automated flow-weighted stormwater samples will be collected from additional BMPs (bioretention filters, groundwater recharge trenches, clean water recharge trenches and sand filters) at inflow and outflow points. Stormwater samples require 0.5 to 1 inch of rain over a 24 hour period not to exceed one inch over 24 hours. Reports should include information on the duration, total rainfall and return interval of the storm based on the site rain gage. Samples will be analyzed for TSS, nitrate, ortho-phosphorus, metals, BOD, TKN, total phosphorus, petroleum hydrocarbons and herbicides/pesticides. Loadings should be estimated where possible and comparisons made to published results for other BMP designs.

Monitoring requirements 1 through 9 will be in effect throughout the construction period. Following completion of construction, TSS monitoring of the sediment pond (requirement 5) will terminate. Post-construction monitoring (requirements 1-4, and 6-9) will continue for five years after construction. Sampling of water quality BMPs (requirement 10) will also have a duration of five years. Reports on BMP monitoring are due to DEP by May 30 and October 31 of each year. County code requires that reports be submitted quarterly. These quarterly reports may be incorporated in these semi-annual reports. This should be reflected in the title of the documents. BMP monitoring reports are to be delivered with data in an electronic format to Mark-Sommerfield at Montgomery County DEP and also to Leo Galanko at Montgomery County DPS. Monitoring requirements 1 through 9 above will be in effect throughout the construction phase of the project. Post construction monitoring TSS readings from the sediment ponds (requirement #5) will not be required. The other monitoring requirements will be in effect for three years after the development is completed. Questions on the monitoring requirements and procedures may be directed to the following personnel.

Mark Sommerfield (240) 777-7737 mark.sommerfield@co.mo.md.us Doug Marshall (240) 777-7740

Leo Galanko (240) 777-6242

douglas.marshall@co.mo.md.us leo.galanko@co.mo.md.us



850 Hungerford Drive • Rockville, Maryland • 20850-1747

Telophone (30)) 279-3425

May 2, 2002

Mr. Arthur Holmes Jr., Chairman Montgomery County Planning Board 8787 Georgia Avenue Silver Spring, Maryland 20910

Dear Mr. Holmes:

Re: Clarksburg Town Center - Site Plan 8-02014 Phase 2

This is to comment on the referenced site plan as it concerns the future elementary school that is to be dedicated to the Board of Education.

We appreciate the recent efforts of M-NCPPC staff and the developer to address our concerns of storm water management, forestation and grading. The developer has agreed to enlarge the storm water management facility to serve the school and configure the property lines to separate it from the future school site. Forestation areas are to be provided off site by the developer. The developer has also agreed, and M-NCPPC concurred, that grading near the existing pond will be modified to provide more buildable area on the school site.

However, we are still concerned about the extensive grading that will be required to make the site a buildable one. Our concerns focus on two grading areas, the adjacent ballifields and the school site itself.

#### Adjacent ballfields

Current plans call for the construction of two ballfields that will be dedicated to the M-NCPPC. Plans call for a ten-foot grade difference between these fields and the school property, necessitating the construction of a retaining wall. Montgomery County Public Schools requests that as a condition of the site plan approval, the applicant be required to re-configure the ballfields, locating them further from the school property line, or if this is not feasible, construct an adequate retaining wall to accommodate the difference in grade.

#### Grading of school site

In developing Terrabrook, the final grades are such that in order to build the school, including the playgrounds, driveways and parking areas, approximately 20 –23 feet of fill dirt will be required across the bulk of the property. This is an unacceptable additional expense and constitutes a condition of excessive grading. In fact, the Montgomery County Council has in the past directed the Board of Education to ensure that any proposed dedicated school sites are usable and will not require major expense to develop. Since

the applicant was not required to complete a final grading study until site plan, this condition was not known at preliminary plan.

As stated in the Montgomery County Code, Section 50-30 (d and e):

"Unless the applicant agrees to pay for additional site preparation costs, a site may be refused as unsuitable because of natural features if site preparation work for the Intended public use will require significant excavation of rock, excessive grading or the grading steep slopes, remedial environmental measures or similar work."

"... if the Board finds that the same can be lessened by a rearrangement of lots and streets or other platting devices, the board may require that the subdivision be so rearranged ..."

MCPS requests that as a condition of site plan approval, the applicant provide adequate engineered fill for the building and rough grade the remainder of the school site to allow school construction at reasonable cost. Alternatively, if this cannot be done, MCPS will consider another site within the subdivision.

Thank you again for your cooperation and assistance. If you need additional information, please contact me at 301-279-3131 or Mary Pat Wilson, site administration specialist at 301-279-3009.

Sincerely.

Janice Turpin

Real Estate Management Team Leader Department of Facilities Management

JMT:mpw Copy to:

Mr. Hawes

Mr. Burke

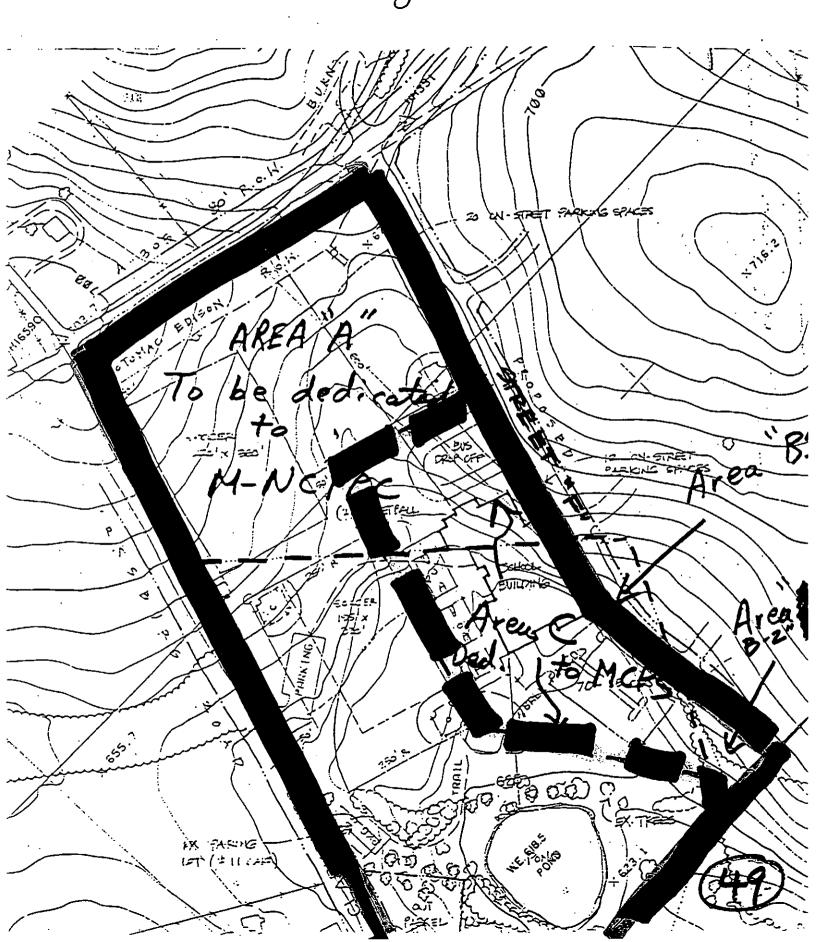
Mr. Shour

Mr. Davis

Ms. Witthans

Ms. Schmieler

# CLARKSBURG TOWN CENTER Preliminary Plan 1-95042





#### DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan County Executive

Robert C. Hubbard

Director

#### MEMORANDUM

May 2, 2002

TO:

Wynn Witthans

Development Review Division - MNCPPC

FROM:

Sarah R. Navid

Right-of-Way Permitting and Plan Review Section

SUBJECT:

Site Plan Review #8-8-02014 - Clarksburg Town Center Phase II

We have reviewed the subject site plan and have the following comments:

- Clarksburg Road the applicant will be responsible for the roadway improvements for one half of the 80' arterial right-of-way from Overlook Park Drive to A-305 (Piedmont Road) in those sections adjacent to the site plan limits. The road will be designed per Standard No. MC-213.04, which includes a 12' wide travel lane, a 12' wide shoulder (4' paved), a ditch, street trees and a bike path along the south side of the road. The bike path will need to be located outside the right-of-way. We will work with MNCPPC and DPWT on the final design details of a possible variable alignment for the bike path along the park and school property. Additionally, left turn lanes (150' minimum length) will be required westbound at Overlook Park Drive and eastbound at A-305. These two intersections will be closed section where the additional lanes are added.
- Piedmont Road (A-305) the applicant will be responsible for the full roadway improvements within the 80' arterial right-of-way from Clarksburg Road to Stringtown Road per Standard No. MC-213.04. Modifications for auxiliary lanes as needed at the intersections will be indicated by DPS at permit review. The bikepath adjacent to the site will need to be located in a PIE. No sidewalk is required on the east side of Piedmont Road.



## Page 2 - Wynn Witthans - Clarksburg Town Center Phase II - May 2, 2002

- <u>Block N</u> the street block adjacent to Lots 39-42 must be private since its only egress is via an alley on the north. We recommend that a <u>waiver</u> be granted to allow <u>single</u> <u>family houses on a private street</u>. The loop road around the central square should be shown as one-way counterclockwise. A <u>horizontal curvature waiver</u> is needed for the curve on the southwest corner of the square.
- <u>Block M</u> the loop road around the square will need a <u>horizontal curvature waiver</u>.
   However, the radius on the curve on the east corner still needs to be increased. The loop road around the square should be shown to operate one-way counterclockwise.
- Grapevine Ridge Road will operate one-way northbound; this should be shown on the plan. The chokers at either end of Grapevine Ridge Road south of Clarksburg Square Road should be climinated.
- Curb ramps at intersections must meet MCDPWT and ADA dimensions; this may
  require some additional right-of-way (truncation) at some intersections. The attached
  drawing shows that where truncations are not provided on tertiary streets, the required
  space to install the six foot long ramp, a five foot level sidewalk area and one foot of
  clearance to the property line is not available.

We appreciate the opportunity to comment on this plan.

srn\clarksburgphase2.doc

cc: Tracy Graves
Les Powell
Greg Leck

A Hachment Clarksburg Town Center - Phase II

need 12'
to accommodate
6' ramp, 5' sw, 1' clearance to PL
only have 10.76'

## MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING



THE MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760

May 2, 2002

#### **MEMORANDUM**

TO:

Wynn Witthans

Development Review Division

FROM:

Cathy Conlor

Countywide Planning Division-Environmental Planning

SUBJECT: Clarksburg Town Center, Phase II – Site Plan No. 8-02014

#### Recommendation

Environmental Planning staff have reviewed the above-referenced plan and required Water Quality Plan. We recommend approval of the Water Quality Plan with the conditions of the MCDPS memo, and approval of the site plan with the following conditions:

- 1. Development Program to include a phasing schedule as follows:
  - a. Clearing and grading to correspond to the construction phasing, to minimize soil erosion.
  - b. Phasing of dedications, stormwater management, sediment/erosion control, recreation, forestation, community paths, trip mitigation or other features.
  - c. Phasing of site clearing and grading to minimize soil erosion.
  - d. Phasing of stormwater management and forest planting.
- 2. Signature set of site, landscape/lighting, forest conservation and sediment and erosion control plans to include for staff review prior to approval by Montgomery County Department of Permitting Services (DPS):
  - a. Undisturbed stream buffers at least 150 to 240 feet wide as shown on the site plan.
  - b. Limits of disturbance.
  - c. Methods and locations of tree protection.
  - d. Forest Conservation areas.

- e. Location of stormwater facility and storm drain outfalls away from forest preservation or other environmentally sensitive areas:
- f. Conditions of DPS Final Water Quality and Stormwater Management Concept approval letter.
- g. Note stating the M-NCPPC staff must inspect tree-save areas and protection devices prior to clearing and grading.
- h. The development program inspection schedule.
- i. Category I conservation easement and park dedication boundary.
- j. Streets trees as shown all public streets.
- k. Details for and location of noise fencing to attenuate current noise levels to no more than 60 dBA Ldn for the outdoor back yard area of homes with side yards facing A-305.
- 3. Forest Conservation Plan shall satisfy all conditions of approval prior to recording of plat and DPS issuance of sediment and erosion control permit.
- 4. No clearing or grading prior to M-NCPPC approval of signature set of plans.
- 5. Record plats to reflect delineation of a Category I Conservation easement which includes the stream/wetland buffers and forest conservation areas, as shown on the site plan, that are not part of the park dedication area.
- 6. Final erosion and sediment control plans shall be submitted to Environmental Planning staff for review and comment prior to approval by MCDPS.
- 7. The Final Forest Conservation Plan must be approved and bonded prior to issuance of the sediment and erosion control permit.
- 8. The outfall from Pond #3, and any other stormwater management facility or storm drain outfalls which extend into the environmental buffer, shall be field located by applicant's representative, MCDPS, and MNCPPC Environmental Planning staff prior to approval of the stormwater management/sediment control permits by MCDPS.
- 9. MNCPPC Environmental Planning staff shall review and approve detailed design plans for any wetland mitigation sites within the environmental buffers prior to issuance of sediment control permits or authorization to clear and grade any of these facilities.

10. Environmental Planning staff must review and approve final grading and limits of disturbance for the park-school site. If grading encroachment into stream buffers is approved as part of this review, compensation with reforestation planting at a rate of 2:1 will be required. This is in addition to other forest conservation planting requirements.

#### Site Conditions

The subject property consists of a portion of the town center site which is located at the headwaters of one of the main branches of Little Seneca Creek, a Use Class IV-P stream. A large part of the site is existing agricultural field. Approximately 9 acres of wetland, 15 acres of floodplain, and 54 acres of forest exist within or in proximity to the stream valleys. The portion of the site covered by this site plan contains two tributary streams. On-site topography slopes significantly from the high point of this section of the plan down to the stream valleys. The stream valleys are moderately steep.

## Discussion of Environmental Findings

## Special Protection Area Guidelines

The Board has adopted guidelines for Park and Planning Department review of projects within SPA's. These guidelines focus on expanding wetland buffers, expanding and accelerating forest conservation opportunities, and limiting site imperviousness levels. They have been addressed by the site plan in the following manner:

BUFFERS - Stream buffers per the Environmental Guidelines and priority forest conservation areas have been protected with the exception of unavoidable intrusions to tie out grading from a few lots and on the park-school site. The intrusions occur in unforested areas and have been minimized. Mitigation for the impacts will be provided by 2:1 reforestation.

FORESTATION – All unforested stream buffers will be reforested using larger stock to minimize the time to canopy closure. A 5-year maintenance program is required to better ensure survival of the planting.

IMPERVIOUSNESS – Imperviousness within the town center far exceeds the level which is desirable in the headwaters of a sensitive watershed such as Little Seneca Creek. Maximum effort has been made to reduce the amount of imperviousness given the proposed development pattern. Hope for reducing the impact of the excessive impervious surfaces lies in providing extraordinary stormwater management facilities and BMP's for all runoff from these surfaces.

#### Water Quality Plan

The Final Water Quality Plan for the town center addresses the Performance goals established during pre-application review, outlines the strategies that will be employed to meet these goals, and includes a detailed plan for water quality monitoring of the streams before, during and after construction. The performance goals include: protection and enhancement of stream channels and associated aquatic habitat; minimization of stormflow runoff increases; minimization of increases to ambient temperature and sediment loading within streams; maintenance of stream base flow; and protection of springs, seeps and wetlands. The strategies employed to meet these goals include: retention and replanting of forest in stream valleys; stringent and redundant sediment control measures; linked stormwater management quantity and quality facilities which provide redundant controls; and BMPs including sand filters, bioretention, clean water recharge, and cool water infiltration and recharge.

Staff concurs with MCDPS that the proposed Final Water Quality Plan meets the SPA requirements for development and grading within the site and for portions of the perimeter arterial roads. We recommend conditional approval of the plan.

## Adequacy of Stream Buffers

Stream buffers per the Environmental Guidelines have been protected, with the exception of unavoidable minor intrusions to tie out grades from a few of the houses and on the park-school site. These intrusions have been minimized and mitigation for the impacts is required. None of the impacted stream buffer areas are currently forested, but all will be reforested.

## Adequacy of Stormwater Management

Stormwater management is provided by several on-site water quantity and quality facilities which have been required as part of the review and approval of the SPA Water Quality Plan. Water quality control will be provided by an extensive series of Best Management Practices (BMP's) including; sand filters, bioretention, clean water recharge; and grass swales. These facilities are linked together with the quantity control facilities which consist of two dry ponds. A portion of Phase II also drains to the wet pond that was approved in the Phase I site plan. The linked stormwater management facilities provide extraordinary and redundant stormwater management controls.

#### Noise Mitigation

Significant noise impact affecting exposed rear yards of houses along A-305 have been mitigated to the extent feasible by noise fencing. Interior noise levels within all of the units along this roadway will be addressed by appropriate building design and construction.

## Forest Conservation

The Site Plan meets all applicable requirements of Chapter 22A regarding forest conservation. Requirements for this phase of the development include preservation of existing forest within and adjacent to the greenway, and reforestation of the unforested stream buffer areas on the entire site. The forest conservation areas will be protected either by park dedication or Category I conservation easement. In addition to the reforestation required by the law, reforestation is required to mitigate for encroachments into the stream buffers with grading as mentioned above. This reforestation will be provided at a rate of two times the areas of encroachment.

## Conformance to the Clarksburg Master Plan

The master plan objectives for development within the Little Seneca Creek watershed include continuously forested buffers, protection and enhancement of wetland systems, water quality monitoring, environmentally sensitive design and construction of development and infrastructure, and maintenance of the environmental qualities of headwaters. The site plan attempts to address these by providing enhanced reforestation in stream valleys and complying with the rigorous stormwater management and water quality standards of the SPA.



#### MONTGOMERY COUNTY DEPARTMENT OF PARK & PLANNING

# THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

8787 Georgia Avenue Silver Spring, Maryland 20910-3760

#### **MEMORANDUM**

May 2, 2002

TO:

Wynn Witthans, Development Review

FROM:

Doug Powell, Park Planning and Resource Analysis

SUBJECT:

Clarksburg Town Center, Site Plan #8-02014

Park Planning and Resource Analysis staff has reviewed the above-referenced Plan and requests certain CONDITIONS OF APPROVAL as set forth below

- Applicant to provide site grading, infield preparation and appropriate seeding for construction of a full sized softball field (foul lines of at least 290') and construction of a full sized soccer field (360' by 220'). Fields to be constructed to park standards and specifications, and are to be located on land being dedicated to M-NCPPC which is adjacent to, and north of the current boundary of Kings Local Park. Applicant acknowledges that there is sufficient earth material on site to construct both fields and agrees to construct the two fields upon commencement of construction of Street "F" referenced in the Preliminary Plan approval, or prior to construction of the proposed elementary school, whichever occurs first. Exact location and orientation of the fields to be coordinated with M-NCPPC staff. This condition can be facilitated by adding the following to your memorandum:

#### a. "Regarding the ball fields,

- a. Applicant will not disturb the two existing athletic fields at Kings Local Park, or cause them to be unusable, until at least such time as the two new fields are operational.
- b. Condition # 6 from approved Preliminary Plan # 1-95042 shall apply as follows:
  - 1. Applicant acknowledges that there is sufficient earth material on site to construct both fields and agrees to construct the two fields upon commencement of construction of Street "F" referenced in the Preliminary Plan approval, or prior to construction of the proposed elementary school, whichever occurs first.

- 2. The exact location and orientation of the fields to be coordinated with M-NCPPC staff.
- 3. The softball field to be full sized with foul lines of 290 feet.
- 4. The soccer field to be full adult size with dimensions of 360' by 220'."
- Applicant to construct paved hiker/biker trails in the following locations:
  - a. Along the east side of Overlook Park Drive from Stringtown Road to Clarksburg Road (Route 121). This trail will be aligned to meet the Clarksburg Greenway Trail from the south side of Stringtown Road.
  - b. From the Clarksburg Greenway Trail along Overlook Park Drive to the Kings Local Park pond trails (two connections to the pond trail).
  - c. Along the south side of Clarksburg Road from the pond area trails to the intersection with Piedmont.
  - d. Along the south side of Piedmont from Clarksburg Road to Street "F".
  - e. Along the west side of Street "F" from Piedmont to Main Street and continuing along Main Street to the Greenway Trail along Overlook Park Drive.

Trails are to be constructed to park standards. Exact trail alignments and widths to be coordinated with M-NCPPC and DPWT staff, and should be appropriately located and landscaped to maintain a park like setting while also fulfilling the need for safe, off road transportation in the area.